Title (en)

EAR-WORN ELECTRONIC DEVICE INCORPORATING GESTURE CONTROL SYSTEM USING FREQUENCY-HOPPING SPREAD SPECTRUM TRANSMISSION

Title (de)

IM OHR GETRAGENE ELEKTRONISCHE VORRICHTUNG MIT GESTENSTEUERUNGSSYSTEM UNTER VERWENDUNG VON FREQUENZSPRUNG-SPREIZSPEKTRUMÜBERTRAGUNG

Title (fr)

DISPOSITIF ÉLECTRONIQUE PORTÉ SUR L'OREILLE INCORPORANT UN SYSTÈME DE COMMANDE DE GESTE UTILISANT UNE TRANSMISSION À ÉTALEMENT DE SPECTRE PAR SAUTS DE FRÉQUENCE

Publication

EP 4000278 A1 20220525 (EN)

Application

EP 20753528 A 20200714

Priority

- US 201962875139 P 20190717
- US 2020041951 W 20200714

Abstract (en)

[origin: WO2021011546A1] An ear-worn electronic device is configured to be worn by a wearer and comprises a wireless transceiver operably coupled to an antenna. The device is configured to transmit, from the transceiver to the antenna, signals at a plurality of different frequencies in accordance with a frequency hopping sequence. The device is configured collect two-dimensional (2-D) reflection coefficient data comprising a reflection coefficient of the antenna as a function of frequency and of time in response to transmission of the signals. The device is configured to detect a particular input gesture of a plurality of input gestures of the wearer using the 2-D reflection coefficient data, and implement a predetermined function of the ear-worn electronic device in response to detecting the particular input gesture.

IPC 8 full level

H04R 1/10 (2006.01); **A61B 5/00** (2006.01); **G06F 3/01** (2006.01); **H04R 25/00** (2006.01)

CPC (source: EP US)

G06F 3/017 (2013.01 - EP US); **H04B 1/713** (2013.01 - US); **H04R 1/1041** (2013.01 - EP US); **H04R 25/558** (2013.01 - EP); H01Q 1/273 (2013.01 - US); H04R 2225/51 (2013.01 - EP)

Citation (search report)

See references of WO 2021011546A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2021011546 A1 20210121; EP 4000278 A1 20220525; US 2022109925 A1 20220407

DOCDB simple family (application)

US 2020041951 W 20200714; EP 20753528 A 20200714; US 202117553710 A 20211216